DETAILED ACTION

Applicants appreciate the Examiner's withdrawal of objections to the specification and to claim rejections under 35 U.S.C. 112, first paragraph and 35 U.S.C. 112, second paragraph. Applicants further acknowledge withdrawal of claim 39 as pointed out by the Examiner.

Claim Rejections – 35 U.S.C. § 103

In view of the Examiner's bases for rejection of claims 2, 3, 5, 7, 8, 18-20, 27, and 30 under 35 U.S.C. 103(a) as being unpatentable over Jurka et al. (1996), Applicants have amended the claims and seek to further prosecute these claims in the Request for Continued Examination submitted herewith.

The Examiner properly notes that Jurka et al. (1996) does not show addition of repeats identified by comparison of a masked query sequence to a repeat sequence database. However, the Examiner is incorrect as to the remaining arguments under this basis of rejection of the claims. Applicant has carefully reviewed the cited page (p. 120) of Jurka et al. (1996) as well as the entirety of that reference and finds no teaching or suggestion to scan the query sequence

against a repeat/masked database that is created using the methods of the invention. At best, Jurka et al. (1996) makes reference to "known" databases that can be queried, but which are replete with repetitive elements which have not been masked. The Examiner properly noted that the existing claims do not recite elements suggesting constructing repeat databases within a single species and a step to create a masked contig assembly for subsequent use as query sequences. The amended claims do now recite those elements.

In view of the Examiner's bases for rejection of claims 2, 6, 16, 19-24, 26-29, and 31-33 under 35 U.S.C. 103(a) as being unpatentable over Jurka et al. (1996) as applied to claims 2, 3, 5, 7, 8, 18-20, 27, and 30 above, and further in view of Altschul et al, Applicants have amended the claims as noted above and seek to further prosecute these claims in the Request for Continued Examination submitted herewith.

Jurka et al. (1996) Altschul et al. does not teach nor does it suggest constructing repeat databases within a single species and creating a masked contig assembly for subsequent use as query sequences.

In view of the Examiner's bases for rejection of claims 2, and 7-9 under 35 U.S.C. 103(a) as being unpatentable over Jurka et al. (1996) as applied to claims 2, 3, 5, 7, 8, 18-20, 27, and 30 above, and further in view of Jurka (1998), Applicants have amended the claims as noted above and seek to further prosecute these claims in the Request for Continued Examination submitted herewith.

The Examiner properly states that Jurka (1998) reviews repeat sequences from a variety of organisms. Jurka et al. (1998) does not teach nor does it suggest constructing repeat databases within a single species and creating a masked contig assembly for subsequent use as query sequences.

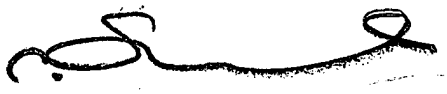
In view of the Examiner's bases for rejection of the claims 2, 22, and 25 under 35 U.S.C. 103(a) as being unpatentable over Jurka et al. (1996) as applied to claims 2, 3, 5, 7, 8, 18-20, 27, and 30 above, and further in view of Sohocki et al., Applicants have amended the claims and seek to further prosecute these claims in the Request for Continued Examination submitted herewith.

Sohocki et al. does not teach nor does it suggest constructing repeat databases within a single species and creating a masked contig assembly for subsequent use as query sequences.

As all bases for rejection of the claims has been fully addressed, Applicants respectfully request that case be allowed.

The Commissioner is authorized to charge to McDaniel & Associates P.C. Deposit Account No. 50/1085, any fee, in addition to any fee for extension of time, deemed necessary to make timely the filing of this response.

Respectfully submitted,



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